

4.10 Risks & Roadblocks

1. Lack Of Support For And Commitment To The Consortium.

In the mind of the Project Manager, the most significant and potentially disruptive issue facing the consortium at this time is a lack of support by many of the stakeholders in the member counties. This can be seen in particular counties by the small number of questionnaires and letters of support which were received. It should be noted that this was not from lack of trying, but from an unwillingness on the part of the stakeholders to participate and/or support. In many counties, people think their current systems are just fine, even if not perfect. In some cases, this sentiment has gone as far as to withhold support for the consortium.

There is also a fear among some stakeholders that without a firmer commitment to the consortium than is currently in place, some agencies may either pull out of the consortium before any accomplishments are made or after they have received help, but before everyone else has. It is believed that a stronger contract or agreement needs to be put into place to keep this from happening.

2. Money.

Money is, of course, on everyone's mind. In the next phase of the project, the consortium needs to concentrate on finding funding sources to pay for the desired upgrades.

4.11 Next Steps

4.11.4 Before Proceeding With The Next Phase

Before proceeding with the next phase of the project, the Project Manager for the Needs Assessment phase encourages the consortium to take up and resolve the following issues:

1. Encourage and solidify the participation of all stakeholders in the consortium.
2. Upgrade all emergency responder stakeholders in the consortium so they have at least: 1) radios, and 2) radios capable of communicating on all the State Mutual Aid frequencies (High VHF). There are some agencies within the consortium who do not have one or the other.

One consortium member suggested making sure that any purchases are for P25-compatible equipment.

4.11.5 Preliminary Plan For The Next Phase

4.11.5.1 High Level Preliminary Plan

The next phase of the project is one in which radios will actually be purchased and installed. At a high level, the plan for the project looks like this:

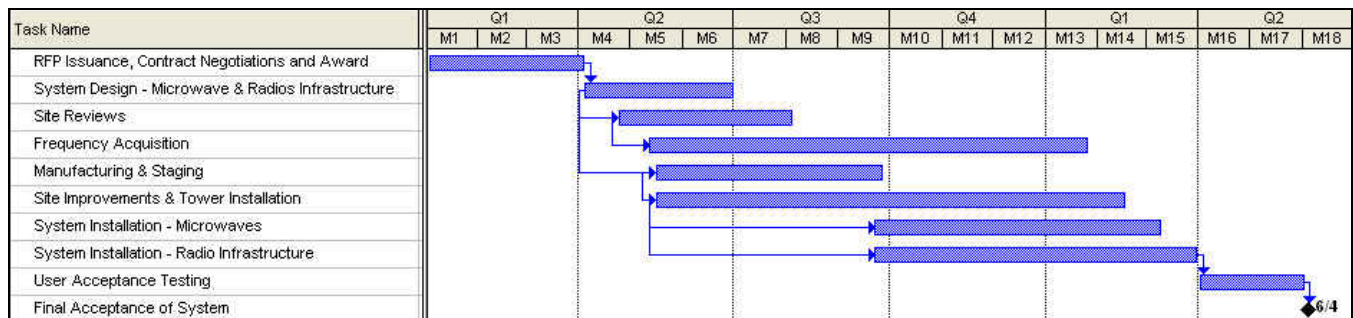


Figure 77 – Preliminary High-Level Workplan & Gantt Chart – Next Phase

This plan and the details presented below are based on Northrop Grumman's experience in managing two of these projects. Based on our most recent experience on the Northern Tier project, the timeframe for several tasks has been expanded. The project is anticipated to take approximately seventeen months to complete.

In order to create a preliminary plan and cost estimate, the project is assumed to take place all at once. This may not be the way it ultimately works out, especially given the amount of money it would take to do it all at once. Other consortia have implemented or are planning on

implementing in stages. One such strategy being considered by some consortia involves the following stages:

1. Convert all consortium stakeholders to high VHF-band radios.
2. Convert all consortium stakeholders to narrow-band radios.
3. Convert all consortium stakeholders to P25 narrow-band radios.
4. Perform site upgrades as necessary (grounding, building, tower, backup power, repeaters & controlling base stations), based on:
 - A. Coverage Needs.
 - B. Making the sites microwave-ready.
5. Implement microwave connectivity.

4.11.5.2 Detailed Preliminary Plan

This section contains another Gantt chart reflecting tasks at a much greater level of detail than the plan above. This detail does not correspond exactly with the high-level Gantt chart presented above. The high-level chart was simplified greatly to improve understandability of the project at a high level.

Project Administration
Communications
Develop Stakeholder Communications Plan
Consortium Meeting Agenda
Consortium Meeting Agenda 1
Consortium Meeting Agenda 2
Consortium Meeting Agenda 3
Consortium Meeting Agenda 4
Consortium Meeting Agenda 5
Consortium Meeting Agenda 6
Consortium Meeting Agenda 7
Consortium Meeting Agenda 8
Consortium Meeting Agenda 9
Consortium Meeting Agenda 10
Consortium Meeting Minutes
Consortium Meeting Minutes 1
Consortium Meeting Minutes 2
Consortium Meeting Minutes 3
Consortium Meeting Minutes 4
Consortium Meeting Minutes 5
Consortium Meeting Minutes 6
Consortium Meeting Minutes 7
Consortium Meeting Minutes 8
Consortium Meeting Minutes 9
Consortium Meeting Minutes 10
Consortium Status Reports
Consortium Status Reports 1
Consortium Status Reports 2
Consortium Status Reports 3
Consortium Status Reports 4
Consortium Status Reports 5
Consortium Status Reports 6
Consortium Status Reports 7
Consortium Status Reports 8
Consortium Status Reports 9
Consortium Status Reports 10
Grantor Status Reports
Grantor Status Reports 1
Grantor Status Reports 2
Grantor Status Reports 3
Grantor Status Reports 4
Grantor Status Reports 5

Figure 78 – Preliminary Detailed Workplan & Gantt Chart – Next Phase



Grantor Status Reports 6
Grantor Status Reports 7
Grantor Status Reports 8
Grantor Status Reports 9
Grantor Status Reports 10
<input type="checkbox"/> Stakeholder Newsletter
Stakeholder Newsletter 1
Stakeholder Newsletter 2
Stakeholder Newsletter 3
Stakeholder Newsletter 4
Stakeholder Newsletter 5
Stakeholder Newsletter 6
Stakeholder Newsletter 7
Stakeholder Newsletter 8
Stakeholder Newsletter 9
Stakeholder Newsletter 10
<input type="checkbox"/> Website Updates
Website Updates 1
Website Updates 2
Website Updates 3
Website Updates 4
Website Updates 5
Website Updates 6
Website Updates 7
Website Updates 8
Website Updates 9
Website Updates 10
<input type="checkbox"/> Financial
Document Funding Sources
Prepare Initial Project Budget
<input type="checkbox"/> Manage Project Budget
Manage Project Budget 1
Manage Project Budget 2
Manage Project Budget 3
Manage Project Budget 4
Manage Project Budget 5
Manage Project Budget 6
Manage Project Budget 7
Manage Project Budget 8
Manage Project Budget 9
Manage Project Budget 10

Technical Design
Assemble Technical Design Team
LMR Footprint Design
Prepare Preliminary Site Selection List
Prepare Propagation Studies for Preliminary Site Selection List
Review Propagation Studies & Refine List
Determine Trunked & Conventional Design
Prepare Recommendation for the Board
Approved Site Selection
Microwave Design
Determine Bandwidth Requirements by Location
Solicit Microwave Design from Microwave Vendors
Review Microwave Design
Prepare Recommendation for the Board
Approved Microwave Design
Frequencies
Inventory Existing Frequency Pool
Solicit Frequency Analysis Services
Assist in Frequency Analysis
Prepare Recommendation for the Board
Approved Frequency Plan
Assist in Frequency Acquisition
Licensed Frequencies
RFP Issuance, Contract Negotiations and Award
Assemble Contract Negotiations Team
Determine Procurement Vehicles for Purchases
Review / Issue Contract for Propagation Studies
Frequency Services
Solicit Quote
Determine Procurement Vehicle
Review / Issue Contract for Services
Microwave Services
Solicit Quote
Determine Procurement Vehicle
Review / Issue Contract for Services
Infrastructure
Solicit Quote
Determine Procurement Vehicle
Review / Issue Contract for Services
Business Practice Review
Assemble Business Practice Review Team
Schedule BPR Meetings

<input type="checkbox"/> Prepare Communications Plan (Mutual Aid)
Wide-Area Trunking Communications
Local-Area Trunking Communications
Local-Area Interop Communications
<input type="checkbox"/> Prepare Standard Operating Procedures
Wide-Area Trunking Communications
Local-Area Trunking Communications
Local-Area Interop Communications
Document BPR Results
Obtain Approval of BPR
Accepted BPR
<input type="checkbox"/> Partnerships
Negotiate MOU with Site Owners
<input type="checkbox"/> Maintenance
Identify Maintenance Requirements
Identify Maintenance Options
Prepare Maintenance Options Costs
Review Financials
Determine Maintenance Plan
Update Financial Plan
Approved Maintenance Schedule
<input type="checkbox"/> Equipment
<input type="checkbox"/> Microwave
Determine Microwave Requirements
Prepare Microwave Specifications
Issue Microwave RFIRFP
Review / Select Vendor
<input type="checkbox"/> Microwave Installation
Path A
Path B
Path C
Microwave Testing
Accepted Microwave Installation
<input type="checkbox"/> Infrastructure
<input type="checkbox"/> Contract Negotiations
Provide Contract to Vendor
Obtain Workplan from Motorola
Obtain Risk Breakdown from Motorola
Establish Procedure
Review/Negotiate Contract
Prepare Contract for Presentation to Consortium
Obtain Approval

Signed Contract
System Design
Review Previous Phase Deliverables
Coverage
Determine Coverage Requirements
Review Site Candidate List
Prepare Propagation Maps
Coverage Design Review
Assist Motorola in Detailed Design
Design Document
Prepare Equipment List
Prepare System Description
Update Statement of Work
Design Approval
Review / Finalize Detailed Design
Approved Detail Design
Frequency Acquisition
Prepare Requirements for Frequencies
Determine Method for Frequency Acquisition
Select / Acquire Required Frequencies
FCC Licensing / STAs Granted
Preliminary Planning
Develop Draft Cutover Plan
Draft Acceptance Test Procedures
Draft Maintenance and Support Plan
Prepare Site Improvement Details
Develop Long term Plan
Develop Connectivity Technical Specifics
Equipment Manufacture
Manufacture Fixed Network Equipment (FNE)
Manufacture Subscribers
Manufacture Non Stages FNE
Ship to Staging
Fleet Mapping
Review Operational Requirements
Develop Fleetmap / Templates
Prepare Programming Codeplugs
Staging
Functional Testing at Factory
Demonstrate System
Acceptance
Ship Equipment

<input type="checkbox"/> Materials Management
Receive, Verify, Log and Store Equipment
Inventory Documentation
<input type="checkbox"/> Site Surveys and Improvements
<input type="checkbox"/> Trunked Sites
<input type="checkbox"/> Heedmore Site
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Tri-Point
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Government Hill
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Fallon
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Makoshika
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Mt. Antelope
Perform Site Survey

Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Richey Divide
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Baker Fire
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Overton
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Gibbs Divide
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Powderville
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Sand Creek
Perform Site Survey

Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Fairview Fire
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Richland County Courthouse
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Sidney Big M
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Baker Big M
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Beaver Hill
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> P25 Conventional Sites
<input type="checkbox"/> Alzada

Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> W. Butte
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Ismay
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Cohagen
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Garfield County North
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Pine Grove
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Sand Springs

Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Wright
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Home Creek
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Moorhead
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Big Sheep Mt.
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Mildred
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Brockton

Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
<input type="checkbox"/> Hurns Creek
Perform Site Survey
Perform Site R56 Audit
Prepare List of Required Improvements
Determine Procurement for Site Improvements
Complete Site Improvements
Site Ready to Receive Equipment
Completed Site Preparation
<input type="checkbox"/> System Installation
<input type="checkbox"/> Trunked Sites
<input type="checkbox"/> Heedmore
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Tri-Point Lookout
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Government Hill
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Fallon
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Makoshika
Installation Voice



Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Mt. Antelope
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Richey Divide
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Baker Fire
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Overton
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Gibbs Divide
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Powderville
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Sand Creek
Installation Voice

Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Fairview Fire Hall
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Richland County Courthouse
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Sidney Big M Tower
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Baker Big M Tower
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Beaver Hill Tower
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> P25 Conventional Sites
<input type="checkbox"/> Alzada
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> W. Butte

Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Ismay
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Cohagen
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Garfield County North
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Pine Grove
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Sand Springs
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Wright Tower
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Home Creek

Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Moorhead
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Big Sheep Mt. Repeater
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Mildred
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Brockton
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
<input type="checkbox"/> Burns Creek
Installation Voice
Link Verification
Site FNE Optimization
Install & Test Antenna System
FNE Installation Complete
Completed Installation
<input type="checkbox"/> System Optimization
System FNE
Dispatch Center
<input type="checkbox"/> System Software
Installation
Unit Testing

Installed Software System
Use Acceptance Testing
<input type="checkbox"/> R-56 Audit
R-56 RF Sites
R-56 Punchlist Resolution
<input type="checkbox"/> Functional
System Acceptance
Acceptance
<input type="checkbox"/> Coverage
Run Coverage Acceptance Test Plan (CATP)
CATP Acceptance
<input type="checkbox"/> Training
Identify Training Participants
Schedule Training
Conduct Training
Completed Training
Finalize
<input type="checkbox"/> Cut-Over
Planning
Customer Agreement
Perform Cut-Over
<input type="checkbox"/> Contract Items
Punchlist Resolution
Service Transition
Documentation
Final Acceptance Of The System
<input type="checkbox"/> Mobiles/Handhelds
Assemble Bid Review Team
Identify Requirements for Mobiles/Handhelds
Prepare Mobiles/Handhelds Bid
Issue Mobiles/Hand Bid
Review / Select Vendor(s)
Mobiles/Handhelds Procurement/Inventory
Mobiles/Handhelds Programming
Test Mobiles/Handhelds
Mobile/Handhelds Installation/Distribution
Accepted Mobiles/Handhelds Procurement